

AMENDMENTS TO THE CLAIMS

LISTING OF CLAIMS:

1-9. (Cancelled)

10. (Currently Amended) An apparatus comprising, a first channel comprising a restriction barrier comprising a first angled wall and a second angled wall positioned relative to the first angled wall to form a first opening at least 1 micron in width or diameter and a second opening less than 10 microns in width or diameter, wherein the first opening has a greater width or diameter than the second opening, further comprising a laser light source and a series of lenses to form a gradient force optical trap.

11. (Original) The apparatus of claim 10, wherein the second opening is less than 1 micron in width or diameter.

12. (Original) The apparatus of claim 10, further comprising a light source and a detector to detect a surface enhanced Raman spectroscopy emission of a molecule irradiated by the light source, the first channel in optical communication with the light source and the detector.

13. (Original) A system comprising: a) a light source; b) a detector to detect a surface enhanced Raman spectroscopy emission of a molecule irradiated by the light source; and c) a first channel in optical communication with the light source and the detector, wherein the first

channel comprises a restriction barrier comprising a plurality of walls to restrain movement of a single particle upstream of light emitted by the light source.

14. (Original) The system of claim 13, wherein the restriction barrier comprises a first angled wall and a second angled wall positioned relative to the first angled wall to form a first opening at least 1 micron in width or diameter and a second opening less than 10 microns in width or diameter, wherein the first opening has a greater width or diameter than the second opening.

15. (Cancelled)

16. (Currently Amended) The system of claim ~~15~~ 14, further comprising a second channel forming a junction with the first channel.

17. (Original) The system of claim 16, wherein the restriction barrier is located upstream of the junction of the first channel and the second channel.

18. (Original) The system of claim 17, wherein the gradient force optical trap is positioned downstream of the junction of the first channel and the second channel.

19. (Original) The system of claim 18, wherein the light source is positioned downstream from the restriction barrier and upstream from the gradient force optical trap.

20. (Original) The system of claim 13, wherein a portion of a flow path in optical communication with the detection light source is coated with silver, gold, platinum, copper or aluminum.

21-45 (Cancelled)